5

10

20

25



What is claimed is:

1. A compound of formula I

$$\begin{array}{c|c}
A_1^5 & A^6 & L^1 - Q^1 \\
A_1^4 & A^3 & R^2
\end{array}$$

(or a pharmaceutically acceptable salt thereof) wherein:

 ${\rm A}^3$, ${\rm A}^4$, ${\rm A}^5$ and ${\rm A}^6$, together with the two carbons to which they are attached, complete a substituted benzene in which ${\rm A}^3$ is ${\rm CR}^3$, ${\rm A}^4$ is ${\rm CR}^4$, ${\rm A}^5$ is ${\rm CR}^5$, and ${\rm A}^6$ is ${\rm CR}^6$; wherein

R³ is hydrogen, methyl, methoxy, fluoro, chloro or carboxy;

one of R^4 and R^5 is hydrogen, (1-4C)alkyl, halo, trifluoromethyl, trifluoromethoxy, R^fO_- , $R^fO_2CCH_2O_-$, $HO(CH_2)_aO_-$ (in which a is 2, 3 or 4), $R^fO_2C_-$, $R^fO_2CCH_2_-$, R^gNH_- , $R^hSO_2_-$, hydroxymethyl, formyl, cyano, acetyl, 1-hydroxyethyl, 1-(hydroxyimino)ethyl, 1-(methoxyimino)ethyl, methylthio or $R^fO_2C(CH_2)_2_-$;

the other of R⁴ and R⁵ is hydrogen; and R⁶ is hydrogen, methyl, fluoro, chloro or methoxy; in which R^f is hydrogen, (1-4C)alkyl or benzyl; R^g is hydrogen or R^hSO₂-; and R^h is (1-4C)alkyl or dimethylamino; or each of R³, R⁴ and R⁶ is hydrogen; and R⁵ is vinyl,

2-cyanovinyl, 2-({(1-2C)alkoxy}carbonyl)vinyl or R^a in which R^a is phenyl (which is unsubstituted or bears one or more substituents independently selected from halo, methyl, methoxy and hydroxy) or heteroaryl (which heteroaryl is a 5-membered aromatic ring which includes one to four

30 heteroatoms selected from sulfur, oxygen and nitrogen or is a 6-membered aromatic ring which includes one to three nitrogen atoms, wherein the heteroaryl is attached at carbon

- 383 -

and may bear one or more methyl substituents on carbon or nitrogen);

 L^1 is -CO-NH- such that $-L^1-Q^1$ is -CO-NH- Q^1 ;

Q¹ is 2-pyridinyl (which bears a methyl, methoxy,

5 methylthio, fluoro or chloro substituent at the 5-position),

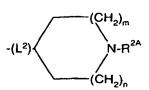
3-pyridinyl (which bears a methyl, fluoro or chloro
substituent at the 6-position), 2-pyrimidinyl (which may
bear a methyl, fluoro or chloro substituent at the

5-position) or 3-pyridazinyl (which may bear a methyl,

10 fluoro or chloro substituent at the 6-position);

20

15



 Q^{2A} (showing the L^2 to which it is attached) is

in which

each of m and n independently is 0 or 1, or m is 2 and $25\,$ n is 1, and

 R^{2A} is hydrogen, t-butyl, methylsulfonyl, -CHRYR², -CHRWR^x, or 4-pyridinyl (which is unsubstituted or bears a substituent R^V at the 2- or 3-position) wherein

RV is methyl, hydroxymethyl, {(1-2C)alkoxy}carbonyl;
30 cyano, carbamoyl, thiocarbamoyl, or N-hydroxyamidino;

- 384 -

each of R^W and R^X independently is hydrogen or (1-3C)normal alkyl; or -CHRWRX is 2-indanyl or (showing the nitrogen to which it is attached) is

5

10

15

20

in which T is a single bond or methylene and U is methylene, ethylene, $\exp(-S(0)_q)$ (wherein q is 0, 1 or 2) or imino (which may bear a methyl substituent), or T is ethan-1,1-diyl and U is a single bond or methylene;

RY is hydrogen or methyl; and

R² is isopropyl, t-butyl, (3-6C)cycloalkyl, phenyl (which is unsubstituted or bears one or more substituents independently selected from halo, methyl, methoxy and hydroxy), 4-quinolinyl or heteroaryl (which heteroaryl is a 5-membered aromatic ring which includes one to four heteroatoms selected from sulfur, oxygen and nitrogen or is a 6-membered aromatic ring which includes one to three nitrogen atoms, wherein the heteroaryl is attached at carbon and may bear one or more methyl substituents on carbon or nitrogen);

or R^{2A} is -L^b-CH₂-R^b in which -L^b- is a direct bond,
-CH₂-, -C(CH₃)H- or -CH₂-CH₂-; and R^b is carboxy,
{(1-2C)alkoxy}carbonyl, cyano, carbamoyl or trifluoromethyl;
or R^{2A} is -CO-R^c in which R^c is hydrogen, (1-3C)alkyl,
{(1-2C)alkoxy}carbonyl-(CH₂)_C- (in which c is 1 or 2),
phenyl (which is unsubstituted or bears one or more
substituents independently selected from halo, methyl,
methoxy and hydroxy), heteroaryl (which heteroaryl is a

5-membered aromatic ring which includes one to four
heteroatoms selected from sulfur, oxygen and nitrogen or is

- 385 -

a 6-membered aromatic ring which includes one to three nitrogen atoms, wherein the heteroaryl is attached at carbon and may bear one or more methyl substituents on carbon or nitrogen) or -NR^dR^e in which each of R^d and R^e is independently hydrogen, methyl or ethyl, or -NR^dR^e is pyrrolidino, piperidino, morpholino or thiomorpholino;

 Q^{2B} is 1-piperazinyl which bears at the 4-position the group R^{2A} (defined as above);

5

10

 Q^{2C} is 3,4-didehydropiperidin-4-yl which bears at the 1-position the group R^{2A} (defined as above);

 Q^{2D} is cyclohexyl which bears at the 4-position the group $-\mathrm{NR}^{\mathrm{S}}\mathrm{R}^{\mathrm{t}}$ in which each of R^{S} and R^{t} independently is hydrogen or methyl or R^{S} and R^{t} together are trimethylene or tetramethylene;

15 Q^{2E} is 1-piperidinyl which bears at the 4-position the group -NR^SR^t (defined as above); and

 Q^{2F} (showing the L^2 to which it is attached) is

15

30

2. The compound of formula I as claimed in Claim 1

$$A_{1}^{5} A_{1}^{6} L^{1} - Q^{1}$$

$$A_{1}^{4} A_{3}^{3} R^{2}$$

5 (or a pharmaceutically acceptable salt thereof) wherein:

 ${\rm A}^3$, ${\rm A}^4$, ${\rm A}^5$ and ${\rm A}^6$, together with the two carbons to which they are attached, complete a substituted benzene in which ${\rm A}^3$ is ${\rm CR}^3$, ${\rm A}^4$ is ${\rm CR}^4$, ${\rm A}^5$ is ${\rm CR}^5$, and ${\rm A}^6$ is ${\rm CR}^6$; wherein

10 R³ is hydrogen, methyl, fluoro, chloro or carboxy; one of R⁴ and R⁵ is hydrogen, (1-4C)alkyl, halo, trifluoromethyl, trifluoromethoxy, R^fO-, R^fO₂CCH₂O-, HO(CH₂)aO- (in which a is 2, 3 or 4), R^fO₂C-, R^fO₂CCH₂-, R^gNH- or R^hSO₂-;

the other of R^4 and R^5 is hydrogen; and R^6 is hydrogen, methyl, fluoro, chloro or methoxy; in which R^f is hydrogen, (1-4C)alkyl or benzyl; R^9 is hydrogen or R^hSO_2 -; and R^h is (1-4C)alkyl or dimethylamino;

 L^1 is -CO-NH- such that $-L^1-Q^1$ is -CO-NH- Q^1 ;

Q¹ is 2-pyridinyl (which bears a methyl, methoxy, methylthio, fluoro or chloro substituent at the 5-position), 3-pyridinyl (which bears a methyl, fluoro or chloro substituent at the 6-position), 2-pyrimidinyl (which may bear a methyl, fluoro or chloro substituent at the 5-position) or 3-pyridazinyl (which may bear a methyl,

5-position) or 3-pyridazinyl (which may bear a methyl, fluoro or chloro substituent at the 6-position);

 $\rm R^2$ is $\rm -L^2-Q^2$ in which $\rm -L^2-$ is -NH-CO-, -NH-CO-X-, -NH-CO-O-X-, -NH-CO-NH-X-, -NH-CH₂- or -O-CH₂-; and $\rm Q^2$ is $\rm Q^{2A}$, $\rm Q^{2B}$, $\rm Q^{2C}$, $\rm Q^{2D}$, $\rm Q^{2E}$ or $\rm Q^{2F}$ wherein X is a single bond or methylene and the values of $\rm L^2$ and $\rm Q^2$ are together selected from -NH-CO-X-Q^{2A}, -NH-CO-O-X-Q^{2A}, -NH-CO-NH-X-Q^{2A},

PCT/US99/29946

- 387 -

-NH-CH₂-Q^{2A}, -O-CH₂-Q^{2A}, -NH-CO-X-Q^{2B}, -NH-CO-Q^{2C}, -NH-CO-Q^{2D}, -NH-CO-Q^{2E} and -NH-CO-Q^{2F} in which: $Q^{2A} \mbox{ (showing the } L^2 \mbox{ to which it is attached) is}$

in which

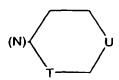
5

10

each of m and n independently is 0 or 1, and R^{2A} is hydrogen, t-butyl, methylsulfonyl, -CHRYRZ, -CHRWRX, or 4-pyridinyl (which is unsubstituted or bears a substituent RV at the 2- or 3-position) wherein

 R^{V} is methyl, hydroxymethyl, {(1-2C)alkoxy}carbonyl; cyano, carbamoyl, thiocarbamoyl, or N-hydroxyamidino;

each of R^W and R^X independently is hydrogen or (1-3C)normal alkyl; or -CHRWRX is 2-indanyl or (showing the nitrogen to which it is attached) is



in which T is a single bond or methylene and U is methylene, ethylene, $\exp(-S(0)_{\mathbf{q}})$ (wherein q is 0, 1 or 2) or imino (which may bear a methyl substituent), or T is ethan-1,1-diyl and U is a single bond or methylene;

RY is hydrogen or methyl; and

25 R² is isopropyl, t-butyl, (3-6C)cycloalkyl, phenyl (which is unsubstituted or bears one or more substituents independently selected from halo, methyl, methoxy and hydroxy), 4-quinolinyl or heteroaryl (which heteroaryl is a

5-membered aromatic ring which includes one to four heteroatoms selected from sulfur, oxygen and nitrogen or is a 6-membered aromatic ring which includes one to three nitrogen atoms, wherein the heteroaryl is attached at carbon and may bear one or more methyl substituents on carbon or nitrogen);

 \mbox{Q}^{2B} is 1-piperazinyl which bears at the 4-position the group \mbox{R}^{2A} (defined as above);

 Q^{2C} is 3,4-didehydropiperidin-4-yl which bears at the 1-position the group R^{2A} (defined as above);

10

 \mathbb{Q}^{2D} is cyclohexyl which bears at the 4-position the group $-NR^SR^t$ in which each of R^S and R^t independently is hydrogen or methyl or R^S and R^t together are trimethylene or tetramethylene;

15 Q^{2E} is 1-piperidinyl which bears at the 4-position the group -NR^SR^t (defined as above); and

 Q^{2F} (showing the L^2 to which it is attached) is

3. A compound of formula I (or a pharmaceutically acceptable salt thereof) as claimed in Claim 2 wherein:

 ${\rm A}^3$, ${\rm A}^4$, ${\rm A}^5$ and ${\rm A}^6$, together with the two carbons to which they are attached, complete a substituted benzene in which ${\rm A}^3$ is ${\rm CR}^3$, ${\rm A}^4$ is ${\rm CR}^4$, ${\rm A}^5$ is ${\rm CR}^5$, and ${\rm A}^6$ is ${\rm CR}^6$; wherein

R³ is hydrogen;

one of \mathbb{R}^4 and \mathbb{R}^5 is hydrogen, methyl, fluoro, chloro, trifluoromethyl, trifluoromethoxy, $\mathbb{R}^{f}O_2C$ - or $\mathbb{R}^{g}NH$ -;

the other of R^4 and R^5 is hydrogen; and R^6 is hydrogen;

in which R^f is hydrogen, (1-4C)alkyl or benzyl; R^g is hydrogen or R^hSO_2 -; and R^h is (1-4C)alkyl or dimethylamino; L^1 is -CO-NH- such that $-L^1-Q^1$ is -CO-NH- Q^1 ;

Q¹ is 2-pyridinyl (which bears a methyl, fluoro or chloro substituent at the 5-position), 3-pyridinyl (which bears a methyl, fluoro or chloro substituent at the 6-position), 2-pyrimidinyl (which may bear a methyl, fluoro or chloro substituent at the 5-position) or 3-pyridazinyl (which may bear a methyl, fluoro or chloro substituent at the 6-position);

 $\rm R^2$ is $\rm -L^2-Q^2$ in which $\rm -L^2-$ is $\rm -NH-CO-$, $\rm -NH-CO-X-$, $\rm -NH-CO-O-X-$, $\rm -NH-CO-NH-X-$, $\rm -NH-CH_2-$ or $\rm -O-CH_2-$; and $\rm Q^2$ is $\rm Q^{2A}$, $\rm Q^{2B}$, $\rm Q^{2C}$, $\rm Q^{2D}$, $\rm Q^{2E}$ or $\rm Q^{2F}$ wherein X is a single bond or methylene and the values of $\rm L^2$ and $\rm Q^2$ are together selected from $\rm -NH-CO-X-Q^{2A}$, $\rm -NH-CO-O-X-Q^{2A}$, $\rm -NH-CO-NH-X-Q^{2A}$, $\rm -NH-CH_2-Q^{2A}$, $\rm -O-CH_2-Q^{2A}$, $\rm -NH-CO-X-Q^{2B}$, $\rm -NH-CO-Q^{2C}$, $\rm -NH-CO-Q^{2D}$, $\rm -NH-CO-Q^{2E}$ and $\rm -NH-CO-Q^{2F}$ in which:

 ${\tt Q}^{2A}$ (showing the ${\tt L}^2$ to which it is attached) is

$$-(L^2)$$
 $(CH_2)_m$ $N-R^{2A}$ $(CH_2)_n$

30

- 390 -

in which

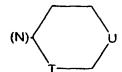
5

each of m and n independently is 0 or 1, and R^{2A} is hydrogen, -CHRYR^Z, -CHRWR^X, or 4-pyridinyl (which is unsubstituted or bears a substituent R^V at the 2-or 3-position) wherein

RV is methyl, hydroxymethyl, {(1-2C)alkoxy}carbonyl;
cyano, carbamoyl, thiocarbamoyl, or N-hydroxyamidino;

each of RW and RX independently is hydrogen or

10 (1-3C)normal alkyl; or -CHRWRX is 2-indanyl or (showing the nitrogen to which it is attached) is



in which T is a single bond or methylene and U is methylene, oxy, thioxy or imino (which may bear a methyl substituent), or T is ethan-1,1-diyl and U is a single bond or methylene;

RY is hydrogen or methyl; and

R^Z is isopropyl, t-butyl, (3-6C)cyclopropyl, phenyl
(which is unsubstituted or bears one or more substituents independently selected from halo, methyl, methoxy and hydroxy), 4-quinolinyl or heteroaryl (which heteroaryl is a 5-membered aromatic ring which includes one to four heteroatoms selected from sulfur, oxygen and nitrogen or is a 6-membered aromatic ring which includes one to three nitrogen atoms, wherein the heteroaryl is attached at carbon and may bear one or more methyl substituents on carbon or nitrogen);

 Q^{2B} is 1-piperazinyl which bears at the 4-position the 30 group R^{2A} (defined as above);

PCT/US99/29946

 Q^{2C} is 3,4-didehydropiperidin-4-yl which bears at the 1-position the group R^{2A} (defined as above);

 Q^{2D} is cyclohexyl which bears at the 4-position the group $-NR^{\text{S}R}^{\text{t}}$ in which each of R^{S} and R^{t} independently is hydrogen or methyl or R^{S} and R^{t} together are trimethylene or tetramethylene;

 Q^{2E} is 1-piperidinyl which bears at the 4-position the group $-NR^{\mathbf{S}R^{\mathbf{t}}}$ (defined as above); and

 Q^{2F} (showing the L^2 to which it is attached) is

10

in which R^O is hydrogen and R^P is acetylamino,
1-hydroxyethyl, 1-hydroxy-1-methylethyl, 1-methoxy1-methylethyl, 4-piperidinyl, 4-pyridinyl,
15 dimethylaminosulfonyl or -J-R^Q in which J is a single bond,
methylene, carbonyl, oxy, -S(O)_Q- (wherein q is 0, 1 or 2),
or -NR^r- (wherein R^r is hydrogen or methyl); and R^Q is
(1-6C)alkyl, phenyl, 3-pyridyl or 4-pyridyl.

- 4. The compound of Claim 1, 2 or 3 wherein halo is fluoro, chloro, bromo or iodo; (1-2C)alkyl is methyl or ethyl; (1-3C)normal alkyl is methyl, ethyl or propyl; (1-4C)alkyl is methyl, ethyl, propyl, isopropyl, butyl, isobutyl, or t-butyl; (1-6C)alkyl is methyl, ethyl, propyl, butyl, pentyl or hexyl; (3-6C)cycloalkyl is cyclopropyl, cyclobutyl, cyclopenytyl or cyclohexyl.
- 5. The compound of any of Claims 1-4 wherein Q¹ is 5-chloropyridin-2-yl, 5-fluoropyridin-2-yl, or 6-chloropyridazin-3-yl.

- 392 -

6. The compound of any of Claims 1-5 wherein R² is (1-isopropylpiperidin-4-ylcarbonyl) amino, (1-cyclohexylpiperidin-4-ylcarbonyl) amino, (4-isopropylpiperazin-1-ylcarbonyl) amino, [1-(tetrahydro-pyran-4-yl)piperidin-4-ylcarbonyl] amino, [4-(1-pyrroli-dinyl)piperidin-1-ylcarbonyl] amino, [1-(4-pyridinyl)piperidin-4-ylmethyl] amino, [1-(2-carboxypyridin-4-yl)piperidin-4-ylmethyl] amino, or [1-(2-methoxycarbonylpyridin-4-yl)-piperidin-4-ylmethyl] amino.

10

20

25

- 7. The compound as claimed in any of Claims 1-6 wherein each of ${\rm R}^3-{\rm R}^6$ is hydrogen.
- 8. The compound as claimed in any of Claims 1-6 wherein each of \mathbb{R}^3 , \mathbb{R}^4 and \mathbb{R}^6 is hydrogen and \mathbb{R}^5 is chloro or fluoro.
 - 9. The compound as claimed in any of Claims 1, 4, 5 and 6 wherein each of \mathbb{R}^3 , \mathbb{R}^4 and \mathbb{R}^6 is hydrogen and \mathbb{R}^5 is \mathbb{R}^a wherein \mathbb{R}^a is phenyl, furanyl, thienyl, 2-isothiazolyl or pyridyl.
 - of formula I as claimed in any of Claims 1-9 which is an acid-addition salt made from a basic compound of formula I and an acid which provides a pharmaceutically acceptable anion or a salt which is made from an acidic compound of formula I and a base which provides a pharmaceutically acceptable cation.

30

11. A pharmaceutical formulation comprising in association with a pharmaceutically acceptable carrier, diluent or excipient, a novel compound of formula I (or a

pharmaceutically acceptable salt thereof) as provided in any of Claims 1-10.

- 12. A process for preparing a compound of formula I

 (or a pharmaceutically acceptable salt thereof) as provided
 in Claim 1 or 2 which is selected from
 - (A) for a compound of formula I in which $-L^2-Q^2$, is $-NH-CO-Q^2$, $-NH-CO-X-Q^2$, $-NH-CO-O-X-Q^2$ or $-NH-CO-NH-X-Q^2$, acylating an amine of formula II,

using a corresponding acid of formula $HO-CO-Q^2$, $HO-CO-X-Q^2$, $HO-CO-O-X-Q^2$, or $HO-CO-NH-X-Q^2$, or an activated derivative thereof;

(B) for a compound of formula I in which $-L^2-Q^2$ is $-O-CH_2-Q^{2A}$, akylating a phenol of formula III

$$A_{A_{3}}^{5} \xrightarrow{A_{6}} L_{A_{3}}^{1-Q_{1}}$$

$$OH$$

20

25

15

10

using a reagent of formula Y-CH $_2$ -Q 2A in which Y is a conventional leaving group;

(C) acylating an amine of formula H_2N-Q^1 , or a deprotonated derivative thereof, using an acid of formula IV, or an activated derivative thereof;

PCT/US99/29946

10

$$A_1^5$$
 OH IV

- for a compound of formula I in which R² is -NH-CH₂-Q^{2A}, alkylating an amine of formula II directly, using a compound of formula Y-CH₂- Q^{2A} , or indirectly by reductive alkylation using an aldehyde of formula Q2A-CHO;
- (E) for a compound of formula I in which R^2 is $-NH-CO-O-X-Q^{2A}$, or $-NH-CO-NH-X-Q^{2A}$, acylating an alcohol of formula $HO-X-Q^{2A}$ or an amine of formula NH_2-X-Q^{2A} , using an activated derivative of an acid of formula VI;

$$A_1^5$$
 A_1^6
 A_1^4
 A_2^6
 A_1^6
 $A_1^$

- (F) for a compound of formula I in which R^2 is $-NH-CO-X-Q^{2B}$ in which X is a single bond, acylating at the 15 1-position a piperazine of formula H-Q2B, using an activated derivative of an acid of formula VI;
- for a compound of formula I in which R^2 is $-NH-CO-X-Q^{2B}$ in which X is methylene, alkylating at the 1-position a piperazine of formula H-Q^{2B}, using an 20 alkylating agent of formula VII

in which Y is a leaving group;

for a compound of formula I in which R^{2A} is 25 methylsulfonyl, substituting the amino nitrogen of a

- 395 -

corresponding compound of formula I in which R^{2A} is hydrogen using an activated derivative of methanesulfonic acid;

(I) for a compound of formula I in which R^{2A} is $-CHR^{y}R^{z}$ or $-CHR^{w}R^{x}$, alkylating the amino nitrogen of a corresponding compound of formula I in which R^{2A} is hydrogen using an alkylating agent of formula Y-CHR $^{y}R^{z}$ or Y-CHR $^{w}R^{x}$ or reductively alkylating the amine using a compound of formula $RY-CO-R^{z}$ or $R^{w}-CO-R^{x}$;

5

20

- (J) for a compound of formula I in which R^{2A} is

 4-pyridinyl (which is unsubstituted or bears a substituent
 R^V at the 2- or 3-position), substituting the amino nitrogen
 of a corresponding compound of formula I in which R^{2A} is
 hydrogen using a corresponding pyridine reagent bearing a
 leaving group Y at the 4-position;
- 15 (K) for a compound of formula I in which R^{2A} is 4-pyridinyl in which R^{V} is alkoxycarbonyl, esterifying a corresponding compound of formula I in which R^{V} is carboxy;
 - (L) for a compound of formula I in which R^{2A} is 4-pyridinyl in which R^{V} is hydroxymethyl, reducing the ester of a corresponding compound of formula I in which R^{V} is alkoxycarbonyl;
 - (M) for a compound of formula I in which R^{2A} is 4-pyridinyl in which R^{V} is carbamoyl, amidating the ester of a corresponding compound of formula I in which R^{V} is alkoxycarbonyl;
 - (N) for a compound of formula I in which R^{2A} is 4-pyridinyl in which R^V is thiocarbamoyl, adding H_2S to the nitrile of a corresponding compound of formula I in which R^V is cyano;
- 30 (O) for a compound of formula I in which R^{2A} is 4-pyridinyl in which R^{V} is N-hydroxyamidino, adding $H_{2}NOH$ to the nitrile of a corresponding compound of formula I in which R^{V} is cyano;

- 396 -

- (P) for a compound of formula I in which R^{2A} is 4-pyridinyl in which R^{V} is carboxy, decomposing the ester of a corresponding compound of formula I in which R^{V} is alkoxycarbonyl;
- (Q) for a compound of formula I in which -NR^SR^t is other than amino, alkylating a corresponding compound of formula I in which -NR^SR^t is amino using a conventional method;

5

15

20

- (R) for a compound of formula I which bears -NR^SR^t,
 10 reductively alkylating H-NR^SR^t using a corresponding compound but in which the carbon to bear the -NR^SR^t group bears an oxo group;
 - (S) for a compound of formula I in which RP is 1-hydroxy-1-methylethyl, adding a methyl group to the carbonyl group of a corresponding compound of formula I in which RP is acetyl using an organometallic reagent;
 - (T) for a compound of formula I in which RP is 1-methoxy-1-methylethyl, treating a corresponding compound of formula I in which RP is 1-hydroxy-1-methylethyl with methanol and an acid catalyst;
 - (U) for a compound of formula I in which R^4 or R^5 is amino, reducing the nitro group of a compound corresponding to a compound of formula I but in which R^4 or R^5 is nitro;
- (V) for a compound of formula I in which R^4 or R^5 is R^9NH and R^9 is R^hSO_2 -, substituting the amino group of a corresponding compound of formula I in which R^4 or R^5 is amino using an activated derivative of the sulfonic acid R^hSO_2 -OH;

whereafter, for any of the above procedures, when a functional group is protected using a protecting group, removing the protecting group;

whereafter, for any of the above procedures, when a pharmaceutically acceptable salt of a compound of formula I is required, it is obtained by reacting the basic form of a

basic compound of formula I with an acid affording a physiologically acceptable counterion or the acidic form of an acidic compound of formula I with a base affording a physiologically acceptable counterion or by any other conventional procedure;

and wherein, unless otherwise specified, A^3-A^6 , L^1 , Q^1 and R^2 have any of the values defined in Claim 1 or 2.

- 13. A method of inhibiting factor Xa comprising10 administering to a mammal in need of treatment, a compound of formula I as provided in any of Claims 1-10.
- 14. The use of a factor Xa inhibiting compound of formula I substantially as hereinbefore described with reference to any of the examples.
 - 15. A novel compound of formula I substantially as hereinbefore described with reference to any of the examples.

20

16. A process for preparing a novel compound of formula I substantially as hereinbefore described with reference to any of the examples.